

Fact Sheet



For Final Minor Modification Permitting Action Under 45CSR30 and Title V of the Clean Air Act

This Fact Sheet serves to address the changes specific to this Minor Modification, and shall be considered a supplement to the Fact Sheet corresponding with the Title V operating permit issued on August 31, 2010.

Permit Number: **R30-07300003-2010**
Application Received: **August 15, 2014**
Plant Identification Number: **03-54-07300003**
Permittee: **CYTEC Industries Inc.**
Facility Name: **Willow Island Plant**
Manufacturing Unit: **Polymer Additives (Part 4 of 4)**
Mailing Address: **1 Heilman Avenue, Willow Island, WV 26134-9801**

Permit Action Number: *MM09* Revised: *January 14, 2015*

Physical Location:	Willow Island, Pleasants County, West Virginia
UTM Coordinates:	474.00 km Easting • 4,356.00 km Northing • Zone 17
Directions:	From Interstate 77, Exit 179, take State Route 2 north for approximately 10 miles. Plant site is on the left (river side) of State Route 2, two miles south of Belmont, WV.

Facility Description

CYTEC Industries is a global, research-based specialty chemical company. The company operates a multi-product, multi-process chemical plant at Willow Island, WV. The Polymer Additives Manufacturing Unit manufactures ultraviolet light absorbers, antioxidants and anti-static agents. The light absorbers are used in all types of plastics (bottles, telephones, lawn furniture, auto parts), in coatings, and in sunscreens. Antioxidants are used in man-made fibers, rubber products, plastics, and in medical applications. Anti-static agents are used in the electronics industry, in copy machine toner, and in textile applications.

This modification includes revisions made in the Polymer Additives manufacturing unit during the first half of 2014 and updated per semiannual reporting requirement of Section 4.5.4.

Emissions Summary

There is no change in potential emissions due to this modification.

Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility maintains the potential to emit over 100 tons per year of criteria pollutants, over 10 tons per year of a single hazardous air pollutant (HAP), and over 25 tons per year of aggregate hazardous air pollutants (HAPs). Due to this facility's potential to emit over 100 tons per year of criteria pollutants, over 10 tons per year of a single hazardous air pollutant (HAP), and over 25 tons per year of aggregate hazardous air pollutants (HAPs), CYTEC Industries Inc. is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

The modification to this facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR7	To Prevent and Control Particulate Matter Air Pollution from Manufacturing Processes and Associated Operations
	45CSR13	Permits for Construction, Modification, Relocation and Operation of Stationary sources
	45CSR30	Operating permit requirement.
State Only:	None	

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
R13-2156U	September 25, 2014	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under

the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table," which may be downloaded from DAQ's website.

Determinations and Justifications

- **Summary of Changes Made During 1st Half of 2014 approved under R13-2156U, issued on September 25, 2014.**

Section	Changes
1.0	<ul style="list-style-type: none"> • Began usage of the new Knock Out Pot 09TX (3-9T4) and the existing Toluene Receiver Tank 07GX (3-7K2) for the Product/Process Area HALS (UV3346, UV3529, UV4593, UV4611, UV4801, UV4802, UV6435, UV6460). • Added the new agitated filter dryer (Emission Unit ID#26FX) with integrated packaging unit (Emission Unit ID# 26HX) and baghouse (Control Device ID# 26GX) to Product/Process Areas CA150, A425, A2246, A1790, UV1164, UV2908, UV3638 and UV3638IA. • Added the existing reactor (Emission Unit ID#20KX (2-19K1)), strip kettle (Emission Unit ID#24MX (2-24K1)) and reactor (Emission Unit ID#24QX (2-24K2)) to Product/Process Areas A1790 and UV2908. • Added the existing 06NX split tank (3-6CD8) to Product/Process Area – S10104, XD-5002. • Corrected the Emission Unit ID for Splitter Bowl in Product/Process Area UV 3638 from “24TX” to “24JX.”
4.0	<p>Section 4.1.4 – Revised vents with Rule 7 applicability due to minor processing changes.</p> <p>Section 4.1.14 – Removed Tank 07GX from the Intermittent Use Equipment table.</p>
Appendix A	<p>Added the new baghouse (Control Device ID# 26GX) for Product/Process Areas CA150, A425, A1790, UV1164, UV2908, UV3638 and UV3638IA.</p>

- **45CSR§7-4.1:** The Emission Unit ID- 26GX in the table 4.1.4 is subject to the hourly particulate matter emission limits of 45CSR§7-4.1. The 45CSR§7-4.1 hourly emission limits were calculated from Table 45-7A based on the maximum hourly process weight rate for a type ‘a’ source. Since the 45CSR§7-4.1 limit for 26GX is 3.48 lb/hr and the maximum hourly PM emission rate is 0.0022 lb/hr (Based on the maximum hourly process rate weight and emission factors from AP-42, Chapter 11.12- “Concrete Batching” (rev. 10/01)), it shows that the Emission Unit ID- 26GX should meet the 45CSR§7-4.1 hourly PM emission limit.
- **40CFR63, Subpart FFFF (National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing (MON))** is applicable to the Polymer Additives Business Unit. There will be no substantive changes to the applicable provisions or the compliance demonstration methodologies of the MON MACT, Subpart FFFF for the Polymer Additives Business Unit as a result of this modification.

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:
None

Request for Variances or Alternatives

None

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: N/A

Ending Date: N/A

Point of Contact

All written comments should be addressed to the following individual and office:

Beena Modi
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1228 • Fax: 304/926-0478
Beena.J.Modi@wv.gov

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Response to Comments (Statement of Basis)

None